

Amendments to the Claims:

1. (CURRENTLY AMENDED) A graphics equalizer utilizing multichannel digital filter bank comprising:

a plurality of first order or second order digital filters, connected in a cascade fashion, whereby said electrical signals are enhanced, attenuated or kept the same, after passing through said cascading sub-filters, wherein said first order or second order digital filters are of the recursive type suitable for graphically equalizing electrical signals received via a communication path, and wherein said first or second order digital filters do not require multiple sampling frequencies, and wherein said first and second order digital filters have programmable parameters which allow users to shape said graphics equalizer's frequency spectra as desired.

2. (CURRENTLY AMENDED) The graphics equalizer ~~multichannel digital filter bank of~~ claim 1, wherein said digital filters are first order and have a transfer function whose equation is

$$H_i(z) = (1 - az^{-1}) / (1 - bz^{-1})$$

absolute values of a and b are < 1

a and b have the same sign.

3. (CURRENTLY AMENDED) The graphics equalizer multichannel digital filter bank of claim 1 wherein said filters are second order and have a transfer function whose equation is

$$H_i(z) = (1 - 2g_i \cos(p_i)z^{-1} + g_i^2 z^{-2}) / (1 - 2r_i \cos(p_i)z^{-1} + r_i^2 z^{-2}).$$

4. (CURRENTLY AMENDED) A method for equalizing electrical signals, utilizing multichannel digital filter bank—, comprising the steps of:

filtering the electrical signals using first order or second order digital filtering, wherein said filters are cascade connected, whereby said electrical signals are enhanced, attenuated, or kept the same, after said step of filtering the electrical signals using first order or second order digital filtering, wherein said filters are cascade connected, wherein said first order or second order digital filtering are of the recursive type suitable for graphically equalizing electrical signals received via a communication path, and wherein said first or second order digital filtering do not require multiple sampling frequencies, and wherein said first or second order digital filters have programmable parameters which allow users to shape said graphics equalizer's frequency spectra as desired.

5. (ORIGINAL) The method of claim 4, wherein the digital filters are of the first order, comprising the steps of:

using a transfer function whose equation is:

$$H_i(z) = (1 - az^{-1}) / (1 - bz^{-1})$$

absolute values of a and b are < 1

a and b have the same sign.

6. (ORIGINAL) The method of claim 4, wherein the digital filters are of the first order, comprising the steps of:

using a transfer function whose equation is:

$$H_i(z) = (1 - 2g_i \cos(p_i)z^{-1} + g_i^2 z^2) / (1 - 2r_i \cos(p_i)z^{-1} + r_i^2 z^2)$$

parameters g and r of the digital filters which determine whether the filter bank enhances the signal, attenuates the signal or simply returns the identical input signal undelayed as the output.